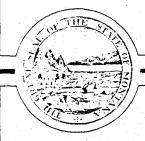
Enu Mise

## DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES



TED SCHWINDEN, GOVERNOR

COGSWELL BUILDING

## STATE OF MONTANA:

HELENA, MONTANA 59620

September 7, 1983



Mr. John Perrin Director of Public Works Drawer C Columbia Falls, MT 59912

Dear John:

On Thursday, August 25, 1983 we looked at a parcel of ground south of Columbia Falls to determine its suitability for a sludge application site. The parcel, consisting of approximately 100-125 acres, is owned by ARCO Metals Company and lies on a bench due south of the Flathead River.

The site appears suitable for use as a sludge injection site. The ground lays fairly flat, with only enough relief to allow natural drainage, which is desirable. There are no major drainageways or other areas which might cause runoff problems. The existing fair quality hays and grasses could benefit from the added moisture and nutrients, and would make the vegetation more desirable for regular cutting and use as animal feed.

I understand that Columbia Falls will be developing a comprehensive sludge utilization management plan prior to actual use of the area, which is anticipated to be sometime next summer. The plan will be useful and would be required to determine some of the basic factors needed to evaluate the possible use of this parcel as a sludge injection site:

- 1) Nutrient values of the sludge;
- 2) Heavy metals in the sludge which could limit annual application rates or the number of years the site could be used;
- 3) Actual application procedures and loading rates;
- 4) Cropping requirements; etc.

September 7, 1983 Page Two

In addition, prior to actual approval of the site, we would need some additional information on soils at the site and depth to groundwater.

One recommendation I would make would be to encourage the use of "grass shanks" on the sludge injection equipment to minimize damage to the crop and surface. This would help insure maximum available injection area and eliminate costly final surface restoration.

If the anticipated haul route is the one we drove out to the site, the old bridge across the river should be carefully evaluated to insure proper load limits are not exceeded.

We look forward to working with you on site suitability and either Mark Weston or I would be glad to answer any questions or assist in any way possible.

Sincerely,

JAMES E. LEITER

Solid Waste Management Bureau

Telephone: (406) 449-2821

JEL:vc

cc: Mark Weston, Water Quality Bureau, DHES

Ken Reick, ARCO Aluminum, P. O. BOX 10, Columbia Falls, MT 59912

Tom Cowan, R.S., 723 Fifth Avenue East, Kalispell, MT 59901

mc: R. A. Sneddon

T. F. Payne

A. J. Canavan

B. A. Hindin/RMI

C. F. Hosmer/RMI